

## Solutions – Exponential to Log Equations (A)

Convert  $\log_8(64) = 2$  into an exponential equation.

$$8^2 = 64$$

Convert  $4^5 = 1024$  into a log equation.

$$\log_4(1024) = 5$$

Convert  $\log_8(32768) = 5$  into an exponential equation.

$$8^5 = 32768$$

Convert  $3^1 = 3$  into a log equation.

$$\log_3(3) = 1$$

Convert  $\log_2(32) = 5$  into an exponential equation.

$$2^5 = 32$$

Convert  $4^1 = 4$  into a log equation.

$$\log_4(4) = 1$$

## Solutions – Exponential to Log Equations (B)

Convert  $\log_7(49) = 2$  into an exponential equation.

$$7^2 = 49$$

Convert  $\log_5(3125) = 5$  into an exponential equation.

$$5^5 = 3125$$

Convert  $2^3 = 8$  into a log equation.

$$\log_2(8) = 3$$

Convert  $6^2 = 36$  into a log equation.

$$\log_6(36) = 2$$

Convert  $6^1 = 6$  into a log equation.

$$\log_6(6) = 1$$

Convert  $\log_3(243) = 5$  into an exponential equation.

$$3^5 = 243$$

## Solutions – Exponential to Log Equations (C)

Convert  $\log_6(36) = 2$  into an exponential equation.

$$6^2 = 36$$

Convert  $9^1 = 9$  into a log equation.

$$\log_9(9) = 1$$

Convert  $8^1 = 8$  into a log equation.

$$\log_8(8) = 1$$

Convert  $\log_3(9) = 2$  into an exponential equation.

$$3^2 = 9$$

Convert  $7^3 = 343$  into a log equation.

$$\log_7(343) = 3$$

Convert  $\log_8(32768) = 5$  into an exponential equation.

$$8^5 = 32768$$

## Solutions – Exponential to Log Equations (D)

Convert  $\log_3(9) = 2$  into an exponential equation.

$$3^2 = 9$$

Convert  $3^3 = 27$  into a log equation.

$$\log_3(27) = 3$$

Convert  $8^1 = 8$  into a log equation.

$$\log_8(8) = 1$$

Convert  $3^5 = 243$  into a log equation.

$$\log_3(243) = 5$$

Convert  $\log_4(16) = 2$  into an exponential equation.

$$4^2 = 16$$

Convert  $\log_6(7776) = 5$  into an exponential equation.

$$6^5 = 7776$$

## Solutions – Exponential to Log Equations (E)

Convert  $\log_2(32) = 5$  into an exponential equation.

$$2^5 = 32$$

Convert  $\log_9(81) = 2$  into an exponential equation.

$$9^2 = 81$$

Convert  $8^2 = 64$  into a log equation.

$$\log_8(64) = 2$$

Convert  $\log_8(32768) = 5$  into an exponential equation.

$$8^5 = 32768$$

Convert  $4^5 = 1024$  into a log equation.

$$\log_4(1024) = 5$$

Convert  $7^3 = 343$  into a log equation.

$$\log_7(343) = 3$$

## Solutions – Exponential to Log Equations (F)

Convert  $3^2 = 9$  into a log equation.

$$\log_3(9) = 2$$

Convert  $\log_8(64) = 2$  into an exponential equation.

$$8^2 = 64$$

Convert  $7^2 = 49$  into a log equation.

$$\log_7(49) = 2$$

Convert  $\log_9(81) = 2$  into an exponential equation.

$$9^2 = 81$$

Convert  $\log_5(5) = 1$  into an exponential equation.

$$5^1 = 5$$

Convert  $7^5 = 16807$  into a log equation.

$$\log_7(16807) = 5$$

## Solutions – Exponential to Log Equations (G)

Convert  $5^5 = 3125$  into a log equation.

$$\log_5(3125) = 5$$

Convert  $\log_5(625) = 4$  into an exponential equation.

$$5^4 = 625$$

Convert  $\log_6(36) = 2$  into an exponential equation.

$$6^2 = 36$$

Convert  $6^3 = 216$  into a log equation.

$$\log_6(216) = 3$$

Convert  $\log_4(1024) = 5$  into an exponential equation.

$$4^5 = 1024$$

Convert  $7^4 = 2401$  into a log equation.

$$\log_7(2401) = 4$$

## Solutions – Exponential to Log Equations (H)

Convert  $\log_9(9) = 1$  into an exponential equation.

$$9^1 = 9$$

Convert  $9^3 = 729$  into a log equation.

$$\log_9(729) = 3$$

Convert  $\log_6(36) = 2$  into an exponential equation.

$$6^2 = 36$$

Convert  $\log_2(4) = 2$  into an exponential equation.

$$2^2 = 4$$

Convert  $2^5 = 32$  into a log equation.

$$\log_2(32) = 5$$

Convert  $4^2 = 16$  into a log equation.

$$\log_4(16) = 2$$



## Solutions – Exponential to Log Equations (I)

Convert  $\log_7(343) = 3$  into an exponential equation.

$$7^3 = 343$$

Convert  $7^5 = 16807$  into a log equation.

$$\log_7(16807) = 5$$

Convert  $2^4 = 16$  into a log equation.

$$\log_2(16) = 4$$

Convert  $\log_2(16) = 4$  into an exponential equation.

$$2^4 = 16$$

Convert  $\log_3(243) = 5$  into an exponential equation.

$$3^5 = 243$$

Convert  $2^3 = 8$  into a log equation.

$$\log_2(8) = 3$$

## Solutions – Exponential to Log Equations (J)

Convert  $8^1 = 8$  into a log equation.

$$\log_8(8) = 1$$

Convert  $\log_2(8) = 3$  into an exponential equation.

$$2^3 = 8$$

Convert  $8^4 = 4096$  into a log equation.

$$\log_8(4096) = 4$$

Convert  $\log_3(9) = 2$  into an exponential equation.

$$3^2 = 9$$

Convert  $3^1 = 3$  into a log equation.

$$\log_3(3) = 1$$

Convert  $\log_4(1024) = 5$  into an exponential equation.

$$4^5 = 1024$$